these results bear a similarity to psychotherapy in which progress does not necessarily follow intellectual recognition of existing problems. The kind of insight with which this study is concerned was differentiated from psychotherapeutic insight. Factors which might have contributed to the lack of differences between the insight and non-insight groups were discussed. It was suggested that limited aspects of the personality when studied in isolation may not encompass a sufficient segment of the entire personality structure to serve as valid indicators of prognosis. Further studies were suggested in which larger clusters of factors reflecting ego-intactness might be incorporated.

REFERENCES

1. CHASE, L. S. and SILVERMAN, S. Prognostic criteria in schizophrenia. *Amer. J. Psychiat.*, 1941-42, *98*, 360-368.
2. ESKEY, A., FRIEDMAN, GLADYS, and FRIEDMAN, I. Disorientation as a prognostic criterion. *J. consult. Psychol.*, 1957, *21*, 149-151.
3. ESKEY, A., and FRIEDMAN, I. The prognostic significance of certain behavioral variables. *J. consult. Psychol.*, 1958, 22.
4. HENDERSON, D., and GILLESPIE, R. *A Textbook of Psychiatry.* London: Oxford University Press, 1952.

A COMPARATIVE JUDGMENTAL STUDY OF "DEFECTION" FROM TREATMENT AT A CHILD GUIDANCE CLINIC[1]

EUGENE E. LEVITT

Indiana University Medical Center

PROBLEM

One of the most persistent and troublesome problems of the child guidance clinic is the family which voluntarily breaks off contact with the clinic after its staff has invested time and effort in the case. The most wasteful type of premature termination occurs at a point following a complete diagnostic, a conference staffing, and the assignment of a therapist. After the clinic has thus spent as much as twenty-five hours on the case, the patient refuses treatment. Some clinics have reported that "defectors" from treatment make up more than 30% of all cases accepted for therapy in a given period.

At present, the factors making for defection are largely unknown. It is conventional to subsume them under the heading of "insufficient motivation for treatment," and to assume that this descriptive label is explanatory.

There are few experimental investigations bearing on the question of therapy defection at the child guidance clinic. Two follow-up studies[1, 3] show that the parents of defector cases offer a wide variety of reasons for defection, suggesting that there is no unitary explanation of the phenomenon. They also indicate that improvement in the child's symptoms is a factor in from 15 to 35% of the cases. A recent comparative study[2] of defector and treatment cases among child clinic patients disclosed no differences on sixty-one diagnostic and descriptive variables.

The present investigation studies three questions pertaining to defection from treatment at the child guidance clinic: Do defectors differ from treatment cases with respect to "motivation for treatment?" Do they differ with respect to severity of symptoms (also frequently regarded by clinicians as a predictive index)? Can expert judges distinguish between defectors and therapy cases using a molar estimate based on diagnostic and identifying data?

[1]This study was supported by funds made available by the Institute for Juvenile Research of Chicago, an agency of the Illinois Department of Public Welfare.

Method

For our purposes, a defector case is defined as one which was accepted for treatment after a complete diagnostic work-up, and which failed to begin therapy. A treatment case is one in which at least one family member had at least five treatment interviews.

The records of fifty defector and fifty treatment cases were selected at random from among those cases closed at the Institute for Juvenile Research in Chicago during the period 1951-1953. All notations concerning treatment were removed from the records of the treated cases.

The records were then submitted to three expert judges[2], two psychologists and a psychiatric social worker. All were ex-IJR employees and all had had at least three years of professional experience. The judges were first asked to identify records of cases with which they had had some contact, or in which some crucial hint concerning disposition had been inadvertently left. Four defector cases and seven treatment cases were discarded on these bases. Of the remaining 43 treatment cases, twenty-four had had a multiple focus of therapy. In sixteen cases, only the mother was treated, and in three cases, only the child. The mean number of treatment interviews for the mothers was 22.29, and for the children, 24.35. The mean number of interviews per family was 36.02. In twenty-seven cases, at least one family member had had at least twenty treatment interviews, and in only six cases was there no family member with at least ten.

The judges were told that there were both defector and treatment cases in the group of records, but they were not told the relative proportions of each. The judges were then asked to make the following judgments: (a) Rate the parents' motivation for treatment for the child on a five-point scale, on which 1 was least motivated and 5, most motivated. (b) Rate the severity of the presenting symptoms in the child on a similar scale[3]. (c) Sort the 89 records into those of cases which had come in for treatment, and those which were defectors.

Results

Overall reliability of the judgments for the 89 cases was estimated by Hoyt's analysis of variance method[(4)]. The coefficients were .75 for motivation, .79 for severity, and .69 for the sort into defector and treatment cases. (There was 100% agreement on the sort for 52 of the 89 records.) While these reliabilities are not high, they appear adequate for the study.

The judgments for motivation and severity of symptoms were then subjected to variance analyses to determine primarily if there were differences between the treated and defector groups. A variance due to judges was also computed. The analyses are summarized in Table 1. The mean scores (averages for the three judges) for motivation are 2.98 for the treated group, and 2.88 for the defectors. The F-ratio is 0.47, which is insignificant. The F for differences among judges is 0.19, which is also insignificant. The interaction between groups and judges yields an insignificant F of 0.14. The mean scores for severity of symptoms are 2.98 for the treated group and 3.02 for the defectors. The F-ratios of 0.20 for groups and 0.14 for interaction are insignificant. The F of the differences among judges is 7.51, which has a p-value beyond .001.

[2]The author is greatly indebted to Drs. Libby Siegel and Rita Weinberg, and to Mrs. Marion Johnstone, who served as the judges for this study.

[3]These scales were admittedly *ad hoc*, and no great pains were taken to maximize their interjudge reliabilities. It was assumed that the commonality of experience at IJR would itself have served as a training period for the judges for the tasks required by the present study. However, an orientation session was held, and certain cues were provided as bases of the judgments. It was suggested that indicators of low motivation might be the parent's statement that coming to the clinic was not her own idea, expressions of doubt about the efficacy of treatment, and reluctance on the part of the parent to become a treatment focus; there might be a record of broken appointments, and of previous clinic treatment, either at IJR or elsewhere. Four major factors were to be considered in evaluating severity of the disturbance: its scope in the child's life, its chronicity, atypicality (i. e., degree of bizarreness), and intensity (degree of incapacitation).

TABLE 1. ANALYSIS OF VARIANCE OF JUDGMENTS OF MOTIVATION AND SEVERITY OF SYMPTOMS OF DEFECTOR AND TREATMENT SAMPLES

Source	Motivation			Severity of Symptoms		
	df	Mean Square	*F*	*df*	Mean Square	*F*
Judges	2	0.260	0.19	2	5.270	7.51*
Samples	1	0.660	0.47	1	0.140	0.20
J x S	2	0.200	0.14	2	0.095	0.14
Within cells	261	1.392		261	0.702	

*P = .001

A summary of the results of the judges' sort into treatment and defector cases is shown in Table 2. All judges identified treated cases better than chance at the .01

TABLE 2. PERCENTAGES OF CASES IDENTIFIED CORRECTLY BY THE JUDGES

Groups	Judge A	Judge B	Judge C	Average
Treated Cases (N = 43)	72.1**	81.4**	88.4**	80.6**
Defectors (N = 46)	58.7	56.5	37.0	50.7
All Cases (N = 89)	65.2**	68.5**	61.8*	65.2**

*Significantly different from chance at the .05 level
**Significantly different from chance at the .01 level

level. The average percentage of correctly identified treated cases is 80.6. However, no judge identified defector cases better than chance, the average being only 50.7%. The overall percentage of cases correctly identified by the judges, the most adequate index of accuracy, is 65.2. This is significantly better than chance at the .01 level. The range of over-all percentages per judge, which is about 61% to 69%, suggests that the overall average is a fairly stable estimate of accuracy.

The probable influence of the judges' estimates of motivation and severity on the sort into treated and defector cases is a matter of incidental interest. These influences can be investigated by means of biserial correlations between each judge's rating of motivation or severity and her own sort. The biserial coefficients are shown in Table 3. All of the correlations between motivation ratings and sorts are

TABLE 3. BISERIAL CORRELATIONS BETWEEN THE JUDGMENTAL VARIABLES AND THE SORT INTO DEFECTOR AND TREATED CASES FOR EACH JUDGE

Between the Sort and	Judge A	Judge B	Judge C	Average
Motivation for treatment	.66**	.91**	.90**	.85**
Severity of symptoms	.00	.31*	.22	.18

*Significant beyond the .05 level
**Significant beyond the .001 level

significant beyond the .001 level. Each judge tended to ascribe higher motivation to the cases which she judged as having entered treatment. However, the correlation between severity judgments and sorts was significant (P = .05) only for Judge B, who tended to rate the defector cases as having greater severity.

DISCUSSION

The data of Table 1 demonstrate that the defector and treated samples did not differ along the dimensions of severity of symptoms or motivation for treatment as

these variables were defined in this study. Although the judges differed significantly among themselves in mean ratings on the former variable, the absence of interaction between judges and samples (even the absolute magnitude is quite small) indicates that these differences are systematic over both samples for all judges. Mean ratings of the judges on motivation did not differ and the interaction is again small and insignificant.

The fairly high accuracy of identification of treated cases by the judges is in part a function of the fact that all judges judged that the percentage of treated cases of all cases was higher than it actually was. This is reflected in the inverse relationship between accuracy of identification of treated and of defector cases. The greater the judge's accuracy for treated cases, the lower her accuracy for defectors. Notably, no judge identified defector cases better than chance. The overall percentages of correct identification of cases (65.2, 68.5 and 61.8) are all better than chance, but they are not very impressive nonetheless. Furthermore, the important action from the point of view of clinic operation is not to identify the good treatment risks, but to single out the prospective defectors. Viewed from that angle, the judges were entirely unsuccessful

The data of Table 3 show, not surprisingly, that the judges based their sorts largely upon their judgment of motivation for treatment. The magnitude of the correlations suggests that they hardly considered any factor other than motivation in deciding if the case would come for treatment. This clearly reflects the contemporary theoretical view of the significance of motivation in determining defection or continuance in therapy, despite the lack of clarity of the concept, and the paucity of experimental evidence. Severity of symptoms appears to have influenced the sorts minimally, or not at all.

Conclusions

The findings of this study suggest that motivation for treatment and severity of symptoms as judged by expert clinicians on the basis of diagnostic and identifying information do not differentiate treatment from defector cases at the child guidance clinic. There is also experimental confirmation of the fact that the clinic staff appears to be relatively unsuccessful in identifying prospective defector cases on the basis of diagnostic and identifying data.

An alternative inference would be that expert clinicians are presently unable to clinically rate motivation for treatment and or severity of symptoms with adequate accuracy. By accepting such an interpretation, one may retain the hypothesis that either or both of these factors actually distinguishes the defector case from the treatment case. The data of this study do not clearly support either of the alternative interpretations.

References

1. Inman, Ann C. Attrition in child guidance: a telephone follow-up study. *Smith Coll. st. soc. Wk.*, 1956, *27*, 34-73.
2. Levitt, E. E. A comparison of "remainers" and "defectors" among child clinic patients. *J. consult. Psychol.*, 1957, *21*, 316.
3. Levitt, E. E. Parents' explanations of "defection" from treatment at a child guidance clinic. *Ment. Hyg.*, in press.
4. Lindquist, E. L. *Design and analysis of experiments in psychology and education.* New York: Houghton Mifflin, 1953.